

WHAT IS CLAIMED IS:

1. A tracking servo apparatus of an optical information recording and reproducing apparatus for recording and reproducing information by irradiating a laser beam onto an optical disc, comprising:

an optical system for obtaining a photoelectric conversion signal by photoelectrically converting reflection light which is obtained when said laser beam is irradiated onto a recording surface of said optical disc;

a tracking error signal generating portion for generating a tracking error signal indicative of a deviation amount of an irradiating position of said laser beam for a track in a disc radial direction on said recording surface by said photoelectric conversion signal;

a spherical aberration detecting portion for detecting a spherical aberration occurring in said optical system;

a level correcting portion for correcting a level of said tracking error signal on the basis of a detection result of said spherical aberration detecting portion; and

a driving portion for moving the irradiating position of said laser beam in the disc radial direction in accordance with the tracking error signal, the level of which has been corrected by said level correcting portion.

2. An apparatus according to claim 1, wherein

said spherical aberration detecting portion generates a voltage signal, as the detection result of the spherical aberration, indicative of an error of a thickness of a

transparent layer at the irradiating position of said laser beam for a specified thickness, and

said level correcting portion includes:

a gain control signal generating portion for generating a gain control signal on the basis of said voltage signal; and

an amplifying portion for receiving the tracking error signal generated from said tracking error signal generating portion and amplifying the received tracking error signal by an amplification gain corresponding to said gain control signal.

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